

Federal Highway Administration
400 Seventh Street, SW
Washington, DC 20590

November 14, 2002

Refer to: HOTO-1

Mr. Mario R. Flores, Jr.
Street Superintendent
Town of Gilbert Public Works
525 North Lindsay Road
Gilbert, AZ 85234

Dear Mr. Flores:

Thank you for your November 6 letter requesting experimentation with yellow-green pavement markings for school zone crossings. You have our approval to begin installing the marking material. This experimentation is approved for a minimum of 1 year.

We have received several inquiries on experimentation with the yellow-green pavement marking materials. We are working with the research staff at the Federal Highway Administration's (FHWA) Turner Fairbank Highway Research Center in developing guidance for an effective evaluation plan and data gathering. The following is a non-exclusive list of data that we recommend be collected for both before and after conditions.

- Vehicle speeds
- Vehicle volumes
- Pedestrian volumes
- Driver behavior (on-set of braking, yielding, etc.)
- Pedestrian behavior (when there is no crossing guard)
- Weather conditions
- Time of day
- Time of year

We believe there is a need to contrast the fluorescent yellow-green markings with white markings. Please add a white stripe immediately parallel to the fluorescent yellow-green stripe as a supplement. The reason for this recommendation is both for daytime visibility, where the fluorescent yellow-green can lose contrast in dirty areas; and nighttime where the fluorescent color would not be as bright.

We also recommend including a control site at a comparable school (elementary, middle, or high school) crossing location in order to validate data collection. This same data would also be collected at that site. If crossing guards are used, then they should be used at both sites. We hope to have a sample data collection form in the near future. Please note that it is not critical that your "after" data collection take place this fall. The collection of the data in the spring

would be acceptable and may even be preferred since the novelty effect may wear off and it would also allow for some weathering of the material.

Please develop an evaluation plan to include the items mentioned above. Please follow the guidelines found in the Manual on Uniform Traffic Control Devices (MUTCD), Section 1A.10 (Items A – I) in addressing administrative details. It is recommended that the white markings at the control site and the contrasting markings be installed at the same time. Also, please acknowledge the following: (1) your agreement that semiannual progress reports will be provided (Section 1A.10, Item I), and (2) your acknowledgement that you agree to restore the site of the experimentation to a condition that complies with the provisions of the MUTCD within 3 months of the end of the time period of the experimentation period. Also, please acknowledge that you agree to terminate the experimentation at any time it is determined significant safety concerns are directly or indirectly attributable to the experimentation. In addition, the FHWA has the authority to terminate this experimentation at any time there is an indication of safety concerns.

For reference purposes, we have assigned your request the following official experimentation number and title: "7-53(E)–Yellow-Green Pavement Markings for School Zone Crossings." Please refer to this number in future correspondence. To expedite the approval process you may fax your revised plan to us at 202-366-3225.

If you have any questions, please call Ms. Cherie L. Kittle at 202-366-2188.

Sincerely yours,

Shelley J. Row, P.E.
Director, Office of Transportation
Operations